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(54) Title: **TELOMERE ELONGATION**

(57) Abstract: The present invention relates, in general, to telomeres, and, in particular, to a method or effecting telomere elongation in mammalian cells. The invention further relates to a protein suitable for use in such a method and to nucleic acid sequences encoding same.

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# INTERNATIONAL SEARCH REPORT

International application No.

PCT/US04/13799

## A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : C12N 5/00, 9/12, 15/00; C07H 21/04; C12P 21/06; C12Q 1/48

US CL : 435/194, 15, 69.1, 320.1, 325; 530/350, 358, 387.3; 536/23.4, 23.2, 23.1

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 435/194, 15, 69.1, 320.1, 325; 530/350, 358, 387.3; 536/23.4, 23.2, 23.1

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)  
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## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EVANS S. K. et al. EST1 and Cdc13 as Comediators of Telomerase Access, Science, October 1, 1999, Vol. 286, pp.117-120; see the abstract; page 118, right and middle columns, page 119, right column, second paragraph	1-2, 6-8, 11-14, 17, 22-24
Y		4, 5
Y	BAUMANN P. et al. Protection-of-Telomere-1 (pot1) Protein and Encoding Polynucleotides, US 2002/0137703 A1, 26 September, 2002;	1-15, 17-24
Y	BAUMAN P. et al., Pot1, the PutativeTelomere End-Binding Protein in Fission Yeast and Humans, Science, 11 May, 2001, Vol. 292, pp. 1171-1175; see particularly page 1174, the right column	1-15, 17-24
X, P	ARMBRUSTER B. N., et al. Putative-Telomere-Recruiting Domain in the Catalytic Subunit of Human Telomerase, Mol. Cell. Biol. May 2003, Vol. 23, No. 9, pp. 3237-3246	1-4, 6-8, 11-14, 17, 21-24
Y, P	COLGIN L. K. et al. Human Pot1 Facilitates Telomere Elongation by Telomerase, Current Biol. 27 May 2003, Vol. 13, pp. 942-946; see the whole document	1-5, 17-24
A, P	LOAYZA D. et al. POT1 as a terminal transducer of TRF1 telomere length control, Nature, 26 June, 2003, Vol. 423, pp. 1013-1018; see the whole document	1-24

☐ Further documents are listed in the continuation of Box C.

☐ See patent family annex.

* Special categories of cited documents:		"T"	later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
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"P"	document published prior to the international filing date but later than the priority date claimed		

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